METHOD AND APPARATUS FOR PROCESSING
FRAME CLASSIFICATION INFORMATION BETWEEN
NETWORK PROCESSORS

ABSTRACT OF THE DISCLOSURE

A network device including an ingress processor and egress processor which receives frames of data over the network on an input port, and transfers it to an appropriate output port. The received frame is processed by an ingress processor which prepares an intra-switch

5   frame for delivery to an egress processor serving a relevant output port of the switch. The intra-switch frame includes a frame header having parameters which have been determined by the ingress processor, as well as data indicating an address for the egress processor for beginning processing of the frame. By identifying to the

10   egress processor processing which has already taken place, the egress processor is relieved of any redundant processing of the frame. The egress processor provides a hardware frame classifier which decodes the information contained in the intra-frame header to derive parameters which have been previously computed as well as a starting

15   address for the egress processor. By reducing the amount of redundant processing of the egress processor, total device throughput delay is reduced.